

November 10, 2008

Dr. Leah Evison U. S. EPA - Region 5 (SR-6J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

Re: Sauget Area 2 Site – October 3, 2002 Unilateral Administrative Order (UAO) Groundwater Operable Unit Monthly Report; October 1 - October 31, 2008 Reporting Period

Dear Dr. Evison:

Attached is the Monthly Report for the Sauget Area 2 Site October 3, 2002 Unilateral Administrative Order (UAO) - Groundwater Operable Unit. This submittal is in fulfillment of the monthly reporting requirements of the UAO, Section XII, paragraph 62, <u>Progress Reports</u>. This report is for the period October 1 – October 31, 2008.

Sincerely,

Steven D. Smith

Project Coordinator

cc: Ken Bardo, - U. S. EPA

Mayor Sauget - Sauget, IL

Sandra Bron – IEPA

Mike Coffey - USFWS

Village of Sauget – c/o P. H. Weis & Associates (Attn: Brian Nelson)

Mayor Frank Bergman – Cahokia

Julie Peshkin - Monsanto

Cathleen Bumb – Solutia

Linda Tape - Husch Blackwell Sanders, LLP

Richard Williams - Solutia

Sauget Area 2 Site - Sauget, Illinois

October 3, 2002 UAO – Groundwater Operable Unit

Status Report

Date of Report:

November 10, 2008

Period Covered:

October 1 - October 31, 2008

Work Performed During the Reporting Period

Site Work

• There was no site work during the reporting period.

Groundwater Treatment

- As agreed upon with USEPA, the Groundwater Migration Control System
 (GMCS) continues to be operated to maintain the total pumping rate equal to the
 computed inflow rate, based on the average of the gradients measured in the two
 existing pairs of piezometers located immediately upgradient of the Site R
 landfill. The system was operated in the above manner during the reporting
 period.
- Well EW-3 was shut down on September 4th because of a faulty power supply line between the main power board and the well. The line was replaced between October 14th and 20th. However, when it was energized, the variable frequency drive in the EW-3 control panel failed. A new drive was ordered and installed on November 4th. The well was put back into service on November 5th.
- Piezometer PZ-4OUT was taken out of service on August 14th because an apparently damaged signal cable was causing an erratic signal. However, it was noted that the signal stabilized once the faulty power supply line to well EW-3 was de-energized, suggested that leakage from that line was affecting the adjacent signal cable. The sensor in the piezometer was changed and the instrument was put back into service on October 15th. The signal has been stable since.
- Third quarter 2008 groundwater samples were collected from the performance monitoring wells and are being analyzed, as were the first semi-annual surface water and sediment samples from the Mississippi River.
- Comments on a Technical Memorandum on Toxicity Based Protective Concentrations submitted as part of the 2007 Annual Report were received from

the Agency on October 3^{rd} . Responses to those comments were submitted on October 16^{th} .

• Water level and pumping data for the reporting period are attached.

Submittals During Reporting Period

There were no documents submitted during the reporting period.

Work Scheduled for Next Reporting Period

- Continue operating the extraction system to maintain the total pumping rate equal to the computed inflow rate.
- Submit the validated analytical data from the second quarter 2008 groundwater samples from the performance monitoring wells and complete the analyses of the third quarter 2008 samples.

PUMPING DATA

GROUNDWATER MIGRATION CONTROL SYSTEM

OCTOBER 2008 DAILY AVERAGE PUMPING RATES AND GROUNDWATER LEVELS

		Computed	Occasional						
Date/Time		Q	Total Q	EW-1 Q	EW-2 Q	EW-3 Q	SWL		
10/1/2008	Daily Average	630.88	615.66	313.53	315.26	0.00	393.54		
10/2/2008	Daily Average	710.57	708.95	354.47	354.48	0.00	392.61		
10/3/2008	Daily Average	762.85	761.41	380.70	380.70	0.00	392.04		
10/4/2008	Daily Average	793.61	793.11	396.53	396.58	0.00	391.38		
10/5/2008	Daily Average	836.03	834.70	417.34	417.36	0.00	390.94		
10/6/2008	Daily Average	875.26	872.55	436.28	436.27	0.00	390.19		
10/7/2008	Daily Average	930.89	933.70	466.87	466.83	0.00	389.64		
10/8/2008	Daily Average	922.30	921.00	460.51	460.48	0.00	389.55		
10/9/2008	Daily Average	916.30	917.48	458.73	458.74	0.00	389.50		
10/10/2008	Daily Average	893.78	892.36	446.17	446.19	0.00	389.12		
10/11/2008	Daily Average	1006.53	1005.76	502.88	502.88	0.00	388.12		
10/12/2008	Daily Average	1074.74	1071.70	535.83	535.87	0.00	387.30		
10/13/2008	Daily Average	1066.13	1069.43	534.71	534.71	0.00	387.17		
10/14/2008	Daily Average	1068.45	1070.08	535.01	535.06	0.00	386.86		
10/15/2008	Daily Average	1076.03	1074.80	537.40	537.39	0.00	386.68		
10/16/2008	Daily Average	1029.75	1032.38	516.22	516.16	0.00	386.73		
10/17/2008	Daily Average	985.08	985.24	492.60	492.64	0.00	387.07		
10/18/2008	Daily Average	972.69	974.05	487.03	487.03	0.00	387.13		
10/19/2008	Daily Average	927.35	919.40	464.86	454.54	0.00	387.25		
10/20/2008	Daily Average	986.50	930.23	492.64	437.59	0.00	386.68		
10/21/2008	Daily Average	1004.72	980.17	501.96	478.20	0.00	386.26		
10/22/2008	Daily Average	1049.32	1049.09	524.88	524.21	0.00	385.70		
10/23/2008	Daily Average	1007.61	1009.41	504.70	504.71	0.00	386.16		
10/24/2008	Daily Average	882.55	884.43	442.23	442.21	0.00	387.20		
10/25/2008	Daily Average	823.67	827.00	413.52	413.49	0.00	387.58		
10/26/2008	Daily Average	540.13	551.51	275.74	275.77	0.00	390.61		
10/27/2008	Daily Average	232.79	239.78	119.98	119.80	0.00	393.22		
10/28/2008	Daily Average	173.05	171.12	85.55	85.57	0.00	393.60		
10/29/2008	Daily Average	247.78	244.38	122.18	122.20	0.00	392.82		
10/30/2008	Daily Average	325.93	324.14	161.95	162.01	0.18	392.02		
10/31/2008	Daily Average	463.03	452.40	230.73	231.31	0.00	391.00		

GROUNDWATER MIGRATION CONTROL SYSTEM

OCTOBER 2008 DAILY AVERAGE PUMPING RATES AND GROUNDWATER LEVELS

		GROUNDWATER LEVELS											
Date	/Time	PZ-5U	PZ-5D	Delta	PZ-6U	PZ-6D	Delta	PZ-7U	PZ-7D	Delta	PZ-8U	PZ-8D	Delta
10/1/2008	Daily Average	398.01	397.45	-0.56	397.97	397.66	-0.30	397.92	397.95	0.02	398.30	397.56	-0.74
10/2/2008	Daily Average	397.61	396.98	-0.63	397.60	397.25	-0.35	397.59	397.58	0.00	397.97	397.14	-0.83
10/3/2008	Daily Average	397.26	396.57	-0.68	397.24	396.86	-0.38	397.26	397.24	-0.02	397.63	396.75	-0.89
10/4/2008	Daily Average	396.82	396.14	-0.68	396.87	396.48	-0.39	396.90	396.88	-0.02	397.27	396.33	-0.94
10/5/2008	Daily Average	396.56	395.83	-0.73	396.61	396.18	-0.43	396.63	396.60	-0.04	397.02	396.04	-0.98
10/6/2008	Daily Average	396.27	395.49	-0.78	396.31	395.89	-0.42	396.35	396.32	-0.03	396.71	395.69	-1.02
10/7/2008	Daily Average	396.00	395.17	-0.83	396.06	395.60	-0.46	396.10	396.04	-0.06	396.47	395.38	-1.09
10/8/2008	Daily Average	395.75	394.93	-0.83	395.79	395.34	-0.44	395.81	395.78	-0.03	396.19	395.12	-1.07
10/9/2008	Daily Average	395.55	394.71	-0.84	395.56	395.08	-0.48	395.58	395.54	-0.04	395.97	394.92	-1.05
10/10/2008	Daily Average	395.35	394.53	-0.82	395.40	394.94	-0.45	395.40	395.37	-0.03	395.78	394.75	-1.03
10/11/2008	Daily Average	394.98	394.09	-0.88	395.05	394.54	-0.50	395.08	395.02	-0.06	395.46	394.28	-1.18
10/12/2008	Daily Average	394.69	393.74	-0.95	394.75	394.24	-0.51	394.82	394.73	-0.09	395.18	393.92	-1.26
10/13/2008	Daily Average	394.40	393.48	-0.92	394.51	393.97	-0.54	394.54	394.47	-0.07	394.91	393.64	-1.26
10/14/2008	Daily Average	394.26	393.32	-0.95	394.31	393.79	-0.52	394.38	394.29	-0.09	394.72	393.47	-1.25
10/15/2008	Daily Average	394.06	393.12	-0.94	394.12	393.62	-0.51	394.19	394.11	-0.09	394.53	393.26	-1.27
10/16/2008	Daily Average	393.83	392.91	-0.93	393.92	393.35	-0.57	393.95	393.87	-0.08	394.27	393.08	-1.19
10/17/2008	Daily Average	393.77	392.90	-0.87	393.83	393.32	-0.50	393.86	393.81	-0.05	394.21	393.06	-1.15
10/18/2008	Daily Average	393.66	392.76	-0.90	393.69	393.18	-0.51	393.68	393.64	-0.04	394.03	392.92	-1.11
10/19/2008	Daily Average	393.62	392.75	-0.87	393.63	393.14	-0.49	393.63	393.59	-0.04	393.97	392.92	-1.05
10/20/2008	Daily Average	393.44	392.55	-0.89	393.49	393.00	-0.49	393.50	393.46	-0.05	393.82	392.68	-1.14
10/21/2008	Daily Average	393.21	392.32	-0.89	393.29	392.77	-0.51	393.30	393.25	-0.05	393.63	392.45	-1.18
10/22/2008	Daily Average	393.05	392.10	-0.95	393.11	392.58	-0.53	393.14	393.07	-0.07	393.46	392.24	-1.22
10/23/2008	Daily Average	392.89	392.01	-0.88	392.97	392.43	-0.54	392.98	392.92	-0.06	393.33	392.14	-1.19
10/24/2008	Daily Average	392.96	392.15	-0.81	392.96	392.50	-0.47	392.97	392.94	-0.03	393.32	392.30	-1.01
10/25/2008	Daily Average	392.96	392.17	-0.79	392.94	392.49	-0.45	392.94	392.91	-0.03	393.27	392.35	-0.92
10/26/2008	Daily Average	393.18	392.61	-0.57	393.10	392.72	-0.38	393.03	393.08	0.05	393.45	392.88	-0.57
10/27/2008	Daily Average	393.68	393.33	-0.35	393.55	393.29	-0.26	393.40	393.55	0.15	393.88	393.71	-0.17
10/28/2008	Daily Average	394.04	393.71	-0.33	393.89	393.69	-0.20	393.72	393.90	0.18	394.21	394.13	-0.08
10/29/2008	Daily Average	394.11	393.80	-0.31	394.03	393.84	-0.19	393.93	394.06	0.13	394.38	394.15	-0.23
10/30/2008	Daily Average	394.05	393.68	-0.37	394.00	393.79	-0.21	393.90	394.03	0.13	394.35	394.02	-0.33
10/31/2008	Daily Average	393.97	393.45	-0.52	393.90	393.65	-0.24	393.83	393.91	0.07	394.22	393.75	-0.47

GROUNDWATER MIGRATION CONTROL SYSTEM

OCTOBER 2008 DAILY AVERAGE PUMPING RATES AND GROUNDWATER LEVELS

		GROUNDWATER LEVELS									
1		PZ-		PZ-		PZ-		PZ-			
		1_OUTSI	PZ-	2_OUTSI	PZ-	3_OUTSI	PZ-	4_OUTSI	PZ-		
Date/Time		DE	1_INSIDE	DE	2_INSIDE	DE	3_INSIDE	DE	4_INSIDE		
10/1/2008	Daily Average	395.16	395.35	392.85	396.47	393.04	396.14		397.46		
10/2/2008	Daily Average	394.46	394.70	391.96	395.84	392.17	395.59		397.00		
10/3/2008	Daily Average	393.92	394.18	391.33	395.36	391.55	395.16		396.64		
10/4/2008	Daily Average	393.34	393.64	390.69	394.87	390.88	394.70		396.21		
10/5/2008	Daily Average	392.99	393.25	390.27	394.48	390.47	394.38		395.89		
10/6/2008	Daily Average	392.46	392.84	389.55	394.10	389.78	394.00		395.56		
10/7/2008	Daily Average	392.00	392.33	389.01	393.65	389.27	393.64		395.27		
10/8/2008	Daily Average	391.84	392.06	388.94	393.39	389.18	393.35		394.97		
10/9/2008	Daily Average	391.72	391.79	388.86	393.16	389.10	393.09		394.74		
10/10/2008	Daily Average	391.44	391.77	388.53	393.08	388.77	392.98		394.58		
10/11/2008	Daily Average	390.73	391.06	387.60	392.42	387.82	392.46	j	394.14		
10/12/2008	Daily Average	390.16	390.56	386.86	391.97	387.10	392.06	;	393.77		
10/13/2008	Daily Average	389.92	390.21	386.67	391.68	386.91	391.76	;	393.47		
10/14/2008	Daily Average	389.74	390.08	386.44	391.52	386.69	391.62		392.50		
10/15/2008	Daily Average	389.53	389.89	386.25	391.30	386.49	391.43	389.72	390.60		
10/16/2008	Daily Average	389.41	389.68	386.25	391.13	386.48	391.22	389.01			
10/17/2008	Daily Average	389.59	389.83	386.59	391.21	386.81					
10/18/2008	Daily Average	389.52	389.68	386.62	391.05	386.83	391.11	388.87			
10/19/2008	Daily Average	389.61	389.81	386.80	391.18	386.97	391.19	388.63			
10/20/2008	Daily Average	389.25	389.57	386.20	390.99	386.44	391.06	388.36	388.93		
10/21/2008	Daily Average	388.89	389.27	385.80	390.70	386.04	390.72	388.3	1 389.04		
10/22/2008	Daily Average	388.46	388.92	385.22	390.35	385.46	390.42	388.48	389.45		
10/23/2008	Daily Average	388.59	388.84	385.56	390.28	385.77	390.29	388.2	5 389.02		
10/24/2008	Daily Average	389.18	389.23	386.56	390.62	386.71	390.51	388.2	5 388.27		
10/25/2008	Daily Average	389.35	389.39	386.87	390.71	387.04	390.56	388.6°	1 388.23		
10/26/2008	Daily Average	390.95	390.29	389.57	391.56	389.64	391.18	391.9	4 390.72		
10/27/2008	Daily Average	392.67	391.82	392.13	392.88	392.14	392.28	394.62	2 391.97		
10/28/2008	Daily Average	393.11	392.49	392.57	393.47	392.56	392.79	395.13	3 393.01		
10/29/2008	Daily Average	392.80	392.54	391.83	393.49	391.89	392.88	394.69	9 392.97		
10/30/2008	Daily Average	392.36	1						9 392.49		
10/31/2008	Daily Average	391.71	391.72								